

[Claims]

[Claim 1]

An electronic circuit characterized by comprising:

a driving element including a plurality of transistors;

5 wherein the plurality of transistors is connected in series when inputting current and the plurality of transistors is connected in parallel when outputting current.

[Claim 2]

An electronic circuit characterized by comprising:

a driving element including a plurality of transistors;

10 wherein the electronic circuit has means to switch between a series connection state and a parallel connection state of the plurality of transistors; and
amplifies an inputted current for output.

[Claim 3]

15 An electronic circuit which amplifies an inputted current when outputted, characterized by comprising:

a driving element including a plurality of transistors; and

a switch,

wherein each gate of the plurality of transistors is connected to each other;

20 at least one of a source or a drain of each of the plurality of transistors is connected to a source or a drain of another transistor of the plurality of transistors; and

the plurality of transistors can be connected either in series or parallel by switching over the switch.

[Claim 4]

An electronic circuit characterized in by comprising:

25 n transistors; and

a first and a second switch,

wherein gates of the n transistors are connected electrically;

either of sources or drains of the n transistors are electrically connected to the first switch respectively;

30 another of sources or drains of the n transistors are electrically connected to the second

switch respectively;

when a current is inputted to the electronic circuit, as for a kth transistor ($k=2$ to less than n) in the n transistors, a current flows through a $(k - 1)$ th transistor to a $(k + 1)$ th transistor via the kth transistor; and

5 when the current is outputted in the electronic circuit, as for the kth transistors, the current flows from the side connected to the second switch to the side connected to the first switch.

[Claim 5]

The electronic circuit according to any of claims 1 to 4, characterized in that the plurality
10 of transistors are either all p-channel type or n-channel type.

[Claim 6]

The electronic circuit according to any of claims 1 to 4, characterized in that channel lengths, channel widths and insulating film thicknesses of the plurality of transistors are all equal.

15 [Claim 7]

The electronic circuit according to any of claims 1 to 4, characterized in that the plurality of transistors are TFTs.

[Claim 8]

An integrated circuit characterized in by using the electronic circuit according to any of
20 claims 1 to 7.

[Claim 9]

A system circuit characterized by using:
the electronic circuit according to any of claims 1 to 7,
wherein the system circuit is formed over a glass substrate.

25 [Claim 10]

An electronic device characterized by using the electronic circuit according to any of claims 1 to 7.

[Claim 11]

The electronic device according to claim 10, characterized in that
30 the electronic device is selected from the group consist of a monitor, a video camera, a

digital camera, a goggle type display, a navigation system, an audio component system, a car audio, a personal computer, a game machine, a mobile computer, a portable phone, a portable game machine, an electronic book, and an image reproduction device provided with a recording medium.

5 [Claim 12]

A personal computer comprising a body, a housing, an external connecting port, and an electronic circuit having a driving element, characterized in

that the driving element comprises a plurality of transistors, and

that the plurality of transistors are in a series connection state when a current is inputted

10 and in a parallel connection state when a current is outputted.

[Claim 13]

A personal computer comprising a body, a housing, an external connecting port, and an electronic circuit having a driving element, characterized in

15 that the electronic circuit comprises a driving element provided with a plurality of transistors and a switch,

that the electronic circuit amplifies an inputted current for output,

that each gate of the plurality of transistors is connected to each other,

that at least one of a source and a drain of each of the plurality of transistors is connected to a source or a drain of other one of the plurality of transistors, and

20 that the plurality of transistors are in a series connection state or a parallel connection state by a switching over of the switch.

[Claim 14]

The personal computer according to claim 12 or 13, characterized in that the personal computer comprises a display portion.

25 [Claim 15]

The personal computer according to claim 12 or 13, characterized in that the electronic circuit is included in a display portion.

[Claim 16]

30 The personal computer according to claim 12 or 13, characterized wherein the personal computer comprises a keyboard and a pointing mouse.